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Remarks by Steve Ballmer
George Washington University
April 19, 2000

MR. BALLMER: Well, I certainly want to thank President Trachtenberg and Dean Phillips for the kind introduction, and for giving me this opportunity. But I really think it's important to get a couple of things out of the way first.

Number one, I feel like I'm in a real theater. There's a real spot there marked Steve Ballmer, and I almost feel like I've been cheating now to move to the podium. But I hope I'll be forgiven by the theater gods for this transgression.

Second thing, and this, I think, is the most important thing of the day. My email address is steveb@microsoft.com, and for those of you who are energetic in e-business and entrepreneurial oriented, steveb@microsoft.com, I dropped out of business school to join Microsoft 20 years ago. And any of you who want to either finish or dropout now to join Microsoft with those qualifications would be more than welcome. With respect, Dean Phillips, with respect, there's incredible opportunity in them thar hills, so to speak. And that's what we really are going to have a chance to talk a little bit about today.

I want to frame the kind of opportunities that we see on the horizon, because I think they're exciting, I think they're dynamic, I can't imagine a better time to be graduating and entering the workforce, and I can't imagine a better industry to join than the information technology industry. So, I want to talk a little bit about the kinds of opportunities that we see.

I thought, before I did that, I would dispense with the question of "who is Microsoft." I don't mean that in the most facetious of ways, but in some senses I think our company has gotten harder to understand as we've gotten more press-worthy, and as we've gotten larger. Many of you would know us as the Windows Company, and those of you who know us as the Windows Company, you really know us at our heart and soul. We're a company that builds enabling software, platform software on which literally hundreds of thousands of other companies have built and have flourished. And it isn't not in the future going to be just Windows the PC operating system. We want to participate in the enablement of new devices, TVs, wireless devices, but at our core we've grown up as a company that builds enabling software on top of which third parties do the work that really is interesting to users far and broad.

Some of you, particularly in business school, may know us as a market success story, revenue, market cap, et cetera. That is a nice thing, and particularly if you've spent any time in a business school, it's great to build opportunity, but people also want to be involved in a successful business.

Some of you, particularly given that you're living here in the D.C. area, may know us as a company that was late to Washington, D.C., and I'm glad that this is the School of Business and Public Management. I think Stanford, where I attended, might have had some of that in the name. I didn't pay as much attention as I think I should have to the public management and public policy aspects of my one-year business education.

Some of you know us as a legal defendant. That I don't wish on anybody in the room.

Some of you know us as a company that was viewed as late to the Internet, and managed to turn it around and really now have a very strong product line-up for the Internet. I certainly think that talks to the dynamic nature of our business, the rapid change, and probably is a lesson for everybody in the audience, and a lesson for us. The business that can't move rapidly, reinvent itself rapidly, whether you're in the IT space, or in any other part of the economy that is dramatically affected by

the fast-changing information technology, I think it's just a lesson to everybody, we must be on our toes. That's the constant hallmark of business.

And probably few of you know us as a research leader. We'll spend about four billion this year in R&D. I think we rank probably now number two or number three, maybe number four, but no lower than that in terms of spending on R&D by all U.S. companies. And a significant investment not only in development activities but also in research, where we'll spend over a quarter of a billion this year in pure research alone.

The good news in being so broad in some senses, and yet still so focused on doing enabling software in others is; we see a lot of people. I would say probably more than any other company in the information technology business, we're in a position where we have reasons to talk to others and to listen to what others have to say. If you're in the wireless business, if you're an I-software development company, if you're a Web site builder, and e-tailer, the broadest spectrum of companies who depend upon information technology have good reasons, and we have good reasons to interact with them to solicit their feedback, their business, to hear what they have to say. And so I do think we're in a unique position to talk about the broad opportunity set that we see in the world.

Microsoft was founded on a vision that was essentially very similar in many ways 25 years ago. Bill Gates and Paul Allen had two basic ideas when they started Microsoft. Number one, that the microprocessor was "a cool piece of technology." And they recognized that first in 1971 when they bought their first microprocessor and started their first microprocessor-driven business, a company called Traf-o- data that tried to analyze these traffic tapes that get punched out when you cross the road, tried to take business away from the folks in Rockville, Maryland, and do local processing on tapes with an old Intel processor. But they saw even back in 1971, while in high school, that these microprocessors would change the world.

Here we are 25 years later, and we're still focused really on that opportunity. Microprocessors are still changing the world. Moore's Law still applies. We still get a doubling of performance every year-and-a- half. Moore's Law is now expanding, it not only hits the computing business, but the whole communications business, the bandwidth business is going through a revolution as it moves to take advantage of Moore's Law. So that was one fundamental premise 25 years ago that remains at least for the next 10 years pretty valid. And, as a general asked me at the Pentagon today, what will we do with 32 gigahertz processors on our systems? And the possibilities are endless, and I'll show you some demonstration of that kind of technology in a little bit.

Number two premise on which Microsoft was founded was also straightforward, which was that software and hardware were independent businesses. Now that may not sound like a big deal today, but you've got to remember in 1975 companies tended to be vertically integrated. A company did its chips, its hardware, its system software, its applications, its systems integration, that tended to come all from Digital or IBM or Wang or Data General or Burroughs at the time, whoever the case may be. And the premise on which our company was built was that software and hardware were separate businesses. It sort of spoke to a whole different industry structure. A structure, which still is maintained today. A structure of specialization. You have chip companies, you have communication companies, you have systems software companies, you have applications companies. People tend to specialize. Now, we've been called out because we participate in two sectors of those, but, heck, it's still a very specialized business. Specialization, though, is interesting because it causes you to form different kinds of business partnerships than people have to do in most industries.

I was at the Washington Post this morning, and I got the question of, what do you mean by partnership? We don't have to go do partnerships with the New York Times, what are you really saying here? Well, in a business where you have the kind of specialization that our business has, we have to know everybody in the chip business, we have to know everybody in the PC business, we have to know the people in the wireless business. We've got to have a way of communicating with software developers who now number almost three million strong in the United States alone. There's over 350,000 companies, small companies, that provide IT services around our platform in this country alone. And those basic premises will apply to this next generation of Microsoft.

The first generation centered around the amazing flexible PC, as we call it. The vision and mission for our company was to help put a personal computer on every desk, and in every home. And if you take a look at it, the computer, which started as a programming machine, became a word processing

machine, became a spreadsheet machine, became a games machine, a communications machine, a finance machine, a productivity machine, a knowledge management machine. The PC is continually morphed to do more and different and a wide variety of things, because it is an amazing device. It's a general-purpose device.

People ask me, as you look to the next 25 years, will cell phones and TV sets and other special purpose devices obliterate the role of the PC? The answer to that question is certainly, 100 percent, categorically, no. That's not to say people won't use those devices. There will be a rapid growth in the way people use TVs and wireless devices to access the Internet. But think about the PC, just when you think all the problems of the world are figured out, somebody figures out how to do something new and exciting, and they always do that work first, and in the richest way on the PC. And that's been an amazing source of opportunity. It's been the platform. Software we've focused in on the last 25 years has been software that let people do these amazing things. First DOS, then Windows, but it was all about this creation of an industry. And just look at the kinds of things that have happened. I talked about this, developers, applications, microprocessors, peripherals, et cetera.

As we enter what, I don't know, I'm not sure I should call it the second generation or the fifth generation of Microsoft, they're both accurate and I'm not going to go through the details, but we are at a critical juncture point not only for our company but for our industry. Our industry is going to remake itself over the next several years. For the last 25 years, we talked about putting a computer on every desk and in every home. That was our mission. Now we talk about empowering people through great software anytime, any place and on any device. And we need to remake ourselves. Our industry needs to remake itself if we're going to allow and enable consumers and businesses around the world to take advantage of the incredible power, which is being unearthed. These new intelligent devices powered by incredible microprocessors, the Internet, just ask yourself the following question, 10 years from now, will the experience of using the Internet be: a) a lot like the experience of using the Internet today; or b) substantially different? You've got to guess B. And why do you have to guess B? Because if you don't guess B, you're betting against the entrepreneurial spirit of everybody in the United States and around the world. There will be incredible new things that can be done. How we get there is uncertain.

When I think back to the fact that I started at Microsoft in 1980, and I think about the transformation between 1980 and 1990, you went from a world where there was no PC to a world where the graphical user interface was very popular in 10 years. Over the '90s, we went from a world that was about graphical user interface to a world that is about where that's assumed, and it's about the Internet. And then we think about the next 10 years, the way in which we use the Internet will be significantly different than the way in which we use the Internet today. And so, I think we have to keep thinking about this evolution, this change, this rapid pace, and so we certainly think of this from a company and an industry perspective as a time in which we remake ourselves.

I said it's a time where we continue to benefit from Moore's Law, it's a little curve there that shows you what Moore's Law means for processing power out through the year 2010, I think, but basically we'll have order of magnitude, what does it say, about 75 times as much processing power as we have today at about the same prices. And you can do a lot of things with it. You can put less processing power in a cheaper package; you can have more processing power and big machines. But this phenomenon will continue. And where the PC has primarily been a device for the desktop, you'll now get these small intelligent devices. I like to think about the TV, that's my favorite new intelligent device. That's where I really need high processing capabilities. I don't need that on my laptop, I mean I'm willing to really work when I'm working with my PC, but I guarantee that 10 years from now I'm going to yell at my television set, "hey, Bill, did you see that putt," and I'm going to expect it to recognize my voice, figure out that Bill refers to Bill Gates, go to my contact list, look for Bill Gates, understand whether he wants to be bothered or not, interrupt him on his television set, and say, "Ballmer says it was a great putt that Davis Lubb just held." I need processing power to my TV set. This is a time of great and rapid -- you can laugh and think it's a funny example, it will happen, and it's just one of countless things that will be different 10 years from now.

Today, we still think about big applications and big mission-critical software things, people still think of the more than I would like as running on expensive hardware, big mainframes, big UNIX systems. Moore's Law tells us quite clearly that over the next 10 years the biggest applications, the biggest Web sites will all be running on PC architecture machines. There won't be a space for sort of

proprietary hardware that doesn't fit in the context of the industry innovation that will happen. All of this implies a time of remaking.

When we think about what's going to happen in the business, we see a lot of change. We go from a world, as I said, of PCs to PCs plus wireless devices and TV devices. We think about going from a world in which software and Web sites are upgraded, not that frequently. I mean, I don't want to point to Windows 2000, because it took five years, but still the average software product takes a couple of years to upgrade or enhance. As we think about the move to the Internet, we see a way in which software becomes a much more continuous, dynamic product that updates itself, that's constantly changing, more like the daily newspaper than what we think about software today. We think about going from a world of packaged software where you take this set of functionality or you take nothing, to a world in which there's a lot more mass customization, where the user can do even more to customize their view of the world, their experience, their user interface. And we see a world in which more and more people effectively become software knowledgeable.

I'll bet if I ask for a show of hands today, a lot of you would consider yourself conversant with the machine, conversant with software. Yet, the number of you who would say, I actually can create my own customized experience, except for some of the personalization you find on Yahoo or MSN or whatever, would probably be pretty limited. The tools will evolve. I think about this in an educational setting. If every educator is not able to program, I'll use that word, enough 10 years from now that at least they can author their own course-ware materials, we will have failed as an industry. There's not that much online curricular information today. Why? Primarily because it's too hard to design that kind of software. The tools will make it easier and easier for non-technical professionals to get involved.

The Internet user experience will change. Instead of just looking at Web sites, which is what I think we do today, you will actually have a much more integrated and personalized experience. Today, what view do you get of the Internet? You get the view that your bank wants to give you, the view that we want to give you, the view that AOL wants to give you. That's what you see. You can't create a site that's really your site that dynamically integrates information that comes from your bank and your this and your that. There's not a level of application integration on the Internet today, or Web site integration that you might like.

Take the following example, 10 years from now I guarantee you, when I book a flight on the Internet that reservation will include information about who I'm visiting. Going to see your sister Shelly, if your flight is late, believe me Shelly will be contacted by the Web site. Shelly will have set up on her own Web site a set of rules, if it's my brother Steve page me, if it's my stock broker ignore it, whatever it is. She'll create her own set of rules. But you're going to have the travel Web site talking to the airline Web site, talking to my sister's Web site, talking to communications providers, talking to me, talking, talking, talking. It's a different experience than the one we get today.

Take a healthcare case, there's a holy grail in the healthcare business, how do you ever get patient records consolidated. I don't know how many people here have ever tried to move between healthcare organizations or get a second opinion, and you've got to go get the lab results. Literally, I once went and picked up test tubes myself because we were moving from Detroit to Seattle, and I had to carry the lab samples. I was positive it would get screwed up otherwise. Well, in the future, you will have a place on the Internet that you just call your health site. And you will give your doctors permission to put lab results in there, X-rays in there. You may give other doctors the permission to go access your records. Ah, my second opinion wants to see my CT scan. I'll give that person, with great security and great privacy, permission, but I won't give this person permission to go do that.

You might want to say to your healthcare company, your HMO, I'll give you permission to look at my records if you commit to give me a lower insurance rate. It might be a fair tradeoff. Or you might say, I never want to let those bums take a look at that at all, it might be a bad deal for me. But, nonetheless, it's that kind of experience you'll expect on the Internet.

The way you control the Internet will move to be much more based upon natural language. I don't mean just voice, speaking, that will be interesting. But the first step will be for me to be able to express what I want and have the systems go make things happen, the PC, the Internet. It is kind of crazy today that in some senses when you search for something on the Internet, you can do more to

express yourself in English than when you want to use some of the common applications on the PC today.

From a Microsoft perspective, we think this represents a world of quite a bit broader partnerships, quite a bit broader set of partnerships. And I don't just mean partnerships like we and you need to be exclusive together. I mean little "p" partnerships. There's a variety of people that need to be contacted and communicated with. There's Web site developers, there's e-tailers, there's business-to-business sites, there's content companies, there's new device manufacturers. In some senses, one of our great challenges right now is keeping up with our own external need to do business development and to do good listening. These are companies who necessarily pay us much money, or to whom we pay a lot of money. But unless we're communicating clearly about our common vision and sharing technical specifications in an open way, we will all fail to achieve that which is very much upon us and possible.

The workplace will be changed. It won't just be changed in the sense of e-commerce, B2B, blah, blah, blah, I'll talk about that in a minute, but it will be changed from the perspective of the knowledge worker. We've been talking about the paperless office, or the paperless school probably for 15 years. How many people in this room can say they lead a paperless life? Well, at least some people are taking notes here on paper, so I've gotcha. It's not 100 percent in the audience. And I'll admit to being a Troglodyte until we launch our new Pocket PC, I'm still using paper myself. But there's a lot of benefit to getting on with the process of moving to be paperless. Not because paper is such a bad thing, but there is so much benefit when you can manage information electronically.

How much has the information technology revolution really done to change the way people have meetings? The number one thing you'll learn that you do when you graduate from business school is have meetings. That's what you do. You go to a lot of meetings. At least that's been my experience in 20 years since I left business school. And you have a lot of meetings. Do people really use computers and information technology to change the way you exchange data? No, generally you still pass out paper at the beginning of a meeting for other people to look at.

Do people do videoconferences? A little bit, but it's not a fundamental part of the management philosophy most places. Boeing is kind if unusual in this regard. Phil Condit, who is the CEO of Boeing, has decided they're going to run their management meeting, and if you can't be there, you participate electronically, and they do screen sharing across their worldwide intranet. And so if you're participating from Tokyo, you're looking at the same things, you're marking up the same documents, you're having that kind of interaction. But that's much more the exception than the rule.

How many people today really have the tools they need to filter what's really important. Usually you see, even in business, you see a view somebody else produces for you of information, not a view that you produce yourself. And I could go on and on and on. One more, I will go on, I guess, I've changed my mind.

Today in business, one of the most important things is understanding your customers, because things are moving so quickly you need to get real-time feedback back from the customer. That may sound kind of trite and obvious, but the Internet and having that kind of digital connection with the customer actually puts us all in a better position to have what we call a digital feedback loop. A loop in which you can stay much more in real time with customer service problems, product problems, feedback, input. You want to do a survey on what customers might think of a new feature? Pop it on the Internet, boom, you don't have to wait months for market research company, bum, bum, bum, bum, bum, you can get feedback from a set of users, a lot of users, very quickly, using the techniques afforded in this world.

The home, the home will be changed, the way in which we watch television. I gave my favorite example, but you can think of others. The way in which you store TV programming and video programming. The degree to which you can recognize the difference between TV programming and games, game software and entertainment software, that line is blurring. I visited a studio in Japan that is very active in doing video console games. We're trying to recruit them to be a partner that supports our new video console. They're also making movies. They're actually, what they're trying to do is do one development effort, and then be able to spin the video game, and spin the animated movie out of the same core R&D work. It's really quite amazing. The home will continue to evolve.

One of my favorites is what we like to refer to as digital memories, the dream of digital memories. Another one of our people talked about the dream of storytelling. Even the people who do digital photography, it's not at a level where I would say most people keep and communicate about the things which are important to them personally all that much yet on the Internet. You see it more in teenagers than you ever have before, but I think I'm going to keep, I know my kids will keep their memories of their life digitally. They'll store all their pictures, they'll have them well indexed and accessible, their videos, their music, the things will be associated with one another, their school papers, their notes.

You know, I go back through the attic and I'm going through shoeboxes and trunks, and blah, blah, blah, and I did that thing in second grade, I have a second grader now, and I really want to show him this thing I did in second grade. Heck if I'll ever find that thing I did in second grade. My second grader, actually he'd probably still have that problem, but my kindergartner will not have that problem, I absolutely positively guarantee it.

We can talk about how business-to-business operations and e-commerce will work, but because I'm running out of time, and because this is an education setting, I thought I'd talk about how education as a business process, if you will, will be enhanced. You will have access to the world's library from your desktop. You will have access to the best lecturers, the best support in the world wherever you are. You'll be able to collaborate on research, on investigation with people wherever they are in the world. You'll be able not only to get at the data of the world, you'll be able to transfer it to places where you can analyze it and manipulate it, and further process it. If you're working on a business school case, and you want to work with somebody who lives far away from you, no problem. If you want to do a business school case where you compare the results from George Washington with the results from a sister school in Paris, no problem.

The technologies will facilitate that. I talked about the evolution and enhancement we expect to see in tools that let educators build curriculum. That will again change the face of education. One of the big interests, and I'm sure it's true here at George Washington is the interest in distance learning. The whole process of education as a business is being transformed. More people are used to using the Internet, more people want to be able to learn in their own time and their own locale, and distance learning will become essentially the business to business and business to consumer enterprise at the educational institution in this new world.

So there's huge, huge, huge opportunity that we see on a go forward basis. There's a couple of fundamental technology things that are happening, and we see our job as to do core enabling software for devices, for servers, and out in the Internet that let people take advantage and build on this foundation. I thought I'd give you just a little bit of a sneak peek of one of the interesting technologies we're working on that might influence the home in education.

And if, Brian, you start things up, we'll take a look at what a group inside our research division is doing, that we call our video skimmer. We'll see a presentation in a minute from Raj Reddy. He's on our technical advisory board, but he's a professor at Carnegie Mellon University, head of the computer science department. This is a recording of a lecture that Raj gave.

Now many of you, I would assume, are a little like me. And with great respect to the educators in the room, I sometimes got fidgety sitting through lectures. Now, a video lecture is interesting, you can get fidgety sitting through a video lecture also. But, what if you had technology that would help you condense that video lecture down to its essence, if you could compress it, and compact it, and take time out.

Roll it, Brian.

(Video shown.)

MR. BALLMER: Compress it more. He's taking out all the breaks, all of the white spots, all of the dead time. Remind me what the compression is on this, from how much minutes down to how much minutes?

MR. HALL: Twenty-eight minutes to fourteen minutes.

MR. BALLMER: Twenty-eight to fourteen, that's not bad. Now all of a sudden you have twice as

much time to do extracurricular work, or interview for jobs, or whatever the favorite is. Not good enough. Shall we take a look at the other one? Okay. This is not a lecture context, this is a little different context, but one that's pretty important to me. I'm a sports fan, but I rarely have time, particularly in baseball, I don't love baseball enough to sit for two-and-a-half, three hours and watch baseball on television. This is a videotape recording of a Seattle Mariners game. What we're going to do here is not just compress, we're also going to look for important action, and we're going to do this, the computer is going to do this, and it's going to flag just the important things for us. So why don't you give us one level of skimming down now, Brian. That's just a baseball game, it's two-and-a-half hours, three hours, whatever it is.

So we take some of it out, but let's skim it down further. Speed it up first, okay.

MR. HALL: We're now down from 2 hours to 3 minutes and 48 seconds.

MR. BALLMER: But, where are the important events, where are the home runs? All I want to do is watch home runs. I don't really sit there to watch all that pitching stuff just show me the home runs.

MR. HALL: Now we're at three minutes, with the big strikeouts and the home runs.

MR. BALLMER: And what you see here is because we have some context on what a baseball game is, it's actually done the analysis and has picked important events and marked them in red, so I can just skim to the important events, as decided by a set of researchers at Microsoft baseball -- I mean, baseball enthusiasts at Microsoft research, we can just skim to the important events. But, the point is, if you think about the applications, serious applications, in education and in entertainment, I think you can imagine something like this becoming pretty important and useful core technology for digital memories, for managing information, for education, for entertainment, et cetera.

Thanks, Brian.

If you ask me what the core bets are for tomorrow, I think the bets are a number. First of all, the PC architecture will continue to matter. Second, integration matters, the way in which the revolution that we foresee will happen is not by having every experience be different. There will be platforms that continue to grow, get new capabilities, and in some senses the things that consumers desire most are integrated experience. And that does imply a certain kind of philosophy of R&D from companies like ours, and other companies in the industry.

R&D matters, and innovation matters, we're not at the end of the road here, as the video skimming demo might highlight. It's important to be entrepreneurial. Software developers matter, this is something with the stock market sky high, and everybody thinking it's all easy money out there, they forget, you've still got to write the code. The stuff still has to do something differentiated, and if you don't do something that is differentiated you will not have a business that has a long-term sustainable position.

We think it's very important to create opportunity. I've hit that theme over, and over, and over again, but I think it's something that can really get lost when you're the subject of the kind of lawsuit that we're a subject of. Our business hasn't thrived because we want to have it all. Our business thrives in large measure because we create opportunities for others. We're working on this right now in our Chinese operation, and we're very much in support of the legislation to make sure that there is absolutely permanent natural trade relationships with China, because our whole success in that marketplace will be dependent on our ability to work with the companies and entrepreneurs in the Chinese market to create opportunities for those businesses to succeed.

People sometimes say to me, but isn't China a very high piracy market? It's a super high piracy market for us. How will that get better? That will get better when the local software industry demands that it get better. And the only way that will happen is if the U.S. normalizes trading relations, on a permanent basis normalizes trading relationships with China, and we focus in on creating opportunities for local Chinese companies, just as an example.

The last thing I want to emphasize, and I want to speak to is, it still matters in business what your values are. I'd say there are two contexts in which this comes up, people ask me; you're the subject of a lawsuit, values matter. It matters to me that we're a company of high integrity. It matters to me a lot. It matters to me when I talk to my kids, my eight year old is sort of old enough to understand

that there's something in the newspaper with daddy's company, and the kids are eight and five and they play video games, and they know it has something to do with how powerful you are. It's a little bit like the super heros that they have to compete against, and they, daddy did you do something wrong, are you too powerful, you're not powerful enough, are you being fair to the other guys.

That's kind of the level of the dialogue. It's super important. It's super important to us, I think it's got to be super important to everybody in business that they behave with the highest integrity. I think entrepreneurial culture matters, I think partnership and opportunity matter, and I think a distinct customer focus matters, and that any business that loses sight of those things is going to have an awfully hard time on a go forward basis.

One aspect of respect for the customer that is really front and center in our minds these days, particularly as this revolution is picking up more and more speed, is the area of privacy. Privacy is an area of incredible concern. It was driven home to me Saturday night when my own wife asked me before we bought some Hall and Oates tickets on the Web whether it was really safe to give our contact information and credit card. I thought, oh my God, we have some work; our work is cut out for us here. Now, part of the problem is we don't have all the technology we really need, and so we're really announcing today that both in our server version of Windows, and our client version of Windows we're building in technology that supports the so-called P3P privacy standards.

We need to make it easy for people when they're surfing the web to know what the privacy policy is of the sites that they're going to visit. We need to make it easy for the Web developers to surface that, and we need to make it easy for the browsers to see it, not we have to go read down to the bottom last, sometimes in very small type, what the privacy policy is. We want to be able to help guide and take people, if they want to be taken, only to sites that respect their privacy in a certain way.

It's very similar to something we've already done in our browser to allow parents to filter out certain kinds of content for their children. And we're enhancing that also with the introduction of what we call a kid's version of our Passport identity technology, which will provide further refinement on the level of control that we give parents over the kind of content and things that their kids can see and do on the Internet, and we're very committed to the so-called COPPA set of standards and approaches to kid's protection on the Internet.

I've gone well beyond my allotted time, at least my personally allotted time, I'm sure. Without even having a watch, I have a sense, but I kind of got rolling and a little excited along the way. But, it would certainly be my great pleasure to have a chance to take a few questions and a little bit of discussion. There are just so many exciting things going on, there's so much opportunity, and particularly for an audience of students involved in business and business school today, I just thought I'd share a little bit of that excitement with you.

Thanks very much.

(Applause.)